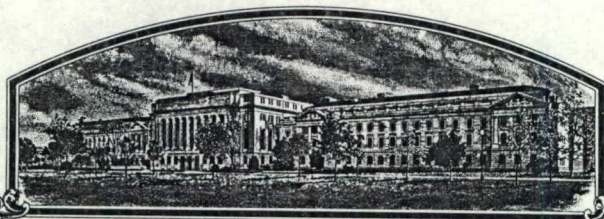


No.



8300037

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wilbur - Ellis Company  
Seed Division

Whereas, THERE HAS BEEN PRESENTED TO THE  
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS SEED OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS PROVIDED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Pilgrim'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this *28th* day of June in the year of our Lord one thousand nine hundred and eighty-five.

Attest

*Kenneth H. Egan*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*John R. Block*  
Secretary of Agriculture







# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) Wilbur - Ellis Company Seed Division		2. TEMPORARY DESIGNATION PVD 865		3. VARIETY NAME PILGRIM	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) East 12001 Empire Way Spokane, Washington 99206 USA		5. PHONE (Include area code) (509)922-1774		FOR OFFICIAL USE ONLY PVPO NUMBER 8300037	
6. GENUS AND SPECIES NAME Phaseolus vulgaris		7. FAMILY NAME (Botanical) Leguminosae		FILING DATE 1/12/83 TIME 2:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
8. KIND NAME Dry Bean - Kidney Type		9. DATE OF DETERMINATION January 15, 1982		AMOUNT FOR FILING \$ 1,000 DATE 1/12/83	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) CORPORATION				FEES RECEIVED AMOUNT FOR CERTIFICATE \$ 500.00 DATE 6/4/85	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION California				12. DATE OF INCORPORATION 1924	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Attention: Floyd A. Weems Wilbur - Ellis Company Seed Division East 12001 Empire Way Spokane, Washington 99206 USA					
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED					
a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)		c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)			
b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement		d. <input type="checkbox"/> Exhibit D, Additional Description of the Variety			
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) <input checked="" type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input type="checkbox"/> No					
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> Foundation <i>CPB per B. Tomic 6/14/85</i> <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified			
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT Floyd A. Weems, Research Director Wilbur - Ellis Company Seed Division				DATE November 20, 1982	
SIGNATURE OF APPLICANT <i>Floyd A. Weems</i>				DATE 1	



## INSTRUCTIONS

**General:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1000 fee ( \$500 filing fee and \$500 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

### Item

- 9 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 15 If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*) the applicant may **NOT** reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

RECEIVED  
JAN 12 1983





## 13 A EXHIBIT A

PILGRIM was derived from the following crosses:

(Taylor Cranberry X DB 610248) X DB 610525 X<sup>2</sup> Taylor Cranberry

TAYLOR CRANBERRY is a commercial bush type, widely used in the Central USA and West Coast dry bean production areas.

DB 610248 - PVD 842 is a breeding line selected from a pole mutant found in PI 156328, having "near" kidney shape, half red - half white seeds. It is resistant to Curly Top Virus (Ruga verrucosus), Bean Common Mosaic Virus (BCMV) BV<sub>1</sub>, NY 15 and Western Strain. This line is highly tolerant to Fusarium solani, Rhizotonia, moisture and temperature stresses. A line obtained from Stokely-VanCamp, Inc.

DB 610525 is a white kidney type breeding line with very vigorous bush, high pod set, long, slender, round pods with 6-7 seeds of "near" white color. The line is resistant to Curly Top Virus, Bean Common Mosaic Virus (BCMV) BV<sub>1</sub> and NY 15 strains. This line is very tolerant to two-spotted mites and<sup>1</sup> Fusarium solani root rot.

Taylor Cranberry was crossed with DB 610248. The resulting F<sub>1</sub> progeny was crossed to DB 610525 and advanced two generations and then back crossed to Taylor Cranberry. The material was then advanced to the F<sub>4</sub> generation where single plant selections were made for seed color, shape, quality, plant type, production potential, disease and insect tolerance. We advanced these selections to the F<sub>6</sub> generation where we found them to be stable phenotypically and genotypically. At this time, we began a rapid seed increase program on what we considered the most superior performing single plant selection PVD 865, to present quantities of our variety PILGRIM. As of this date, we have observed no variants in single plant selection PVD 865, the variety PILGRIM.

## PILGRIM

## 13 B EXHIBIT B

Wilbur-Ellis Company, Seed Division believes we are the original and only breeder of the dry bean variety PILGRIM and base novelty on the following:

PILGRIM is most similar to the Cranberry variety Taylor.

Plants of PILGRIM under Exhibit "C" are type 4 - "high bush form", whereas Taylor Cranberry is type 2 - "stem bush form".

Plants of PILGRIM are very vigorous and average 49 centimeters in height, whereas Taylor Cranberry is 13 centimeters shorter and less vigorous.

Folage of PILGRIM is very substantial and remains physiologically functional, even when pods are mature (dry seeds), whereas Taylor Cranberry is normally not physiologically functional at pod maturity (dry seeds).

Plants of PILGRIM are very compact with "pod-set" concentrated beneath the leaf canopy, whereas Taylor Cranberry is open with "pod-set" exposed.



7- 3083





CONTINUED:

13 <sup>B</sup>~~A~~ EXHIBIT <sup>B</sup>~~A~~ *crabapple*

Pods of PILGRIM are set in a very concentrated pattern, with all maturing (buckskin color) within 5-6 days, whereas Taylor Cranberry "pod-set" is not concentrated, with pod maturity (buckskin color) occurring over a 10-11 day period.

Seeds of PILGRIM are elliptical in shape (hilum view), whereas Taylor Cranberry is round. In cross-section, PILGRIM is oval, whereas Taylor Cranberry is round.

PILGRIM is resitant to Curly Top Virus, whereas Taylor Cranberry is very susceptible.

Maturity of PILGRIM averages 4 days earlier than Taylor Cranberry.



8300037





Replacement Exhibit C<sup>1</sup> recd 10/2/84

FORM APPROVED: OMB NO. 40-R3822

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Bean)

OBJECTIVE DESCRIPTION OF VARIETY

BEAN (*Phaseolus vulgaris* L.)

NAME OF APPLICANT(S) WILBUR - ELLIS COMPANY; SEED DIVISION	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) East 12001 Empire Way Spokane, Washington 99206	PVPO NUMBER 8300037
	VARIETY NAME OR TEMPORARY DESIGNATION PILGRIM (PVD 865)

Place numbers in the boxes (e.g. ) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: . Please answer questions appropriate for your variety if the information is available.

1. TYPE:

1 = Field (dry-edible) 2 = Garden

2. MARKET MATURITY:

<input type="text" value="N"/> <input type="text" value="A"/> Days to edible pods	<input type="text" value="N"/> <input type="text" value="A"/> Days to green shells
<input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="6"/> Days to dry seeds	
<input type="text" value="N"/> <input type="text" value="A"/> Heat units to edible pods	<input type="text" value="N"/> <input type="text" value="A"/> Heat units to green shells
<input type="text" value="N"/> <input type="text" value="A"/> Heat units to dry seeds	
<input type="text" value="1"/> <input type="text" value="1"/> No. days earlier than .....	<input type="text" value="9"/> 1 = Tendercrop
None other for type.. Same as ..	<input type="text" value="N"/> <input type="text" value="A"/> 2 = Kentucky Wonder
<input type="text" value="N"/> <input type="text" value="A"/> No. days later than .....	<input type="text" value="N"/> <input type="text" value="A"/> 3 = Kinghorn Wax
	<input type="text" value="N"/> <input type="text" value="A"/> 4 = White Kidney
	<input type="text" value="N"/> <input type="text" value="A"/> 5 = Michelite 62
	<input type="text" value="N"/> <input type="text" value="A"/> 6 = Dwarf Horticultural
	<input type="text" value="N"/> <input type="text" value="A"/> 7 = Bush Blue Lake 290
	<input type="text" value="N"/> <input type="text" value="A"/> 8 = Other (specify below)
	9 = <u>Royal Red Kidney</u>
	10 = 9 Days earlier than Seafarer
	11 = 5 Days earlier than Emerson

3. PLANT:

<input type="text" value="1"/> 1 = Determinate	2 = Indeterminate
<input type="text" value="4"/> <input type="text" value="9"/> cm height	
<input type="text" value="0"/> <input type="text" value="5"/> cm shorter than .....	<input type="text" value="9"/> comparison variety from above
Same as ..	<input type="text" value="N"/> <input type="text" value="A"/>
<input type="text" value="1"/> <input type="text" value="3"/> cm taller than .....	<input type="text" value="10"/>
<input type="text" value="4"/> <input type="text" value="0"/> cm spread	<input type="text" value="3"/> <input type="text" value="4"/> Number primary branches near base
<input type="text" value="0"/> <input type="text" value="9"/> cm narrower than .....	<input type="text" value="11"/> comparison variety from above
width same as ...	<input type="text" value="9"/>
<input type="text" value="N"/> <input type="text" value="A"/> cm wider than .....	<input type="text" value="N"/> <input type="text" value="A"/>
<input type="text" value="2"/> Main stalk: 1 = brittle . 2 = wirey	<input type="text" value="1"/> Branching habit: 1 = compact 2 = open
	<input type="text" value="1"/> 1 = stout 2 = thin







## 3. PLANT: (Cont'd)

☐ 2 Pod position: 1 = low 2 = high 3 = scattered

☐ 4 Bush form (illustrated below): Very uniform



1 = spherical bush form



2 = stem bush form



3 = wide bush form



4 = high bush form

5 = other (specify) \_\_\_\_\_

## 4. LEAVES:

☐ 1 1 = smooth 2 = wrinkled

☐ 2 1 = dull 2 = glossy

☐ 4 Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop) 4 = Royal Red Kidney

☐ 2 Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green as Royal Red Kidney  
3 = dark green (as dark or darker than Bush Blue Lake 290)

## 5. FLOWERS:

☐ 3 Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple 6 = Other (specify) \_\_\_\_\_

35 - ☐ 3 ☐ 7 Days to 50% bloom

## 6. FRESH PODS: (Edible maturity, average for 20 pods)

☐ 6 Exterior color: 1 = light green (as light or lighter than Bountiful)  
2 = medium green  
3 = dark green (as dark or darker than Bush Blue Lake 290)  
4 = light yellow (Brittlewax)  
5 = golden yellow (Cherokee Wax)  
6 = green-red variegated (Horticultural)  
7 = other (specify) \_\_\_\_\_

% Sieve size distribution at optimum maturity for non-flat pods

## Note:

1 = 4.76 mm to 5.76 mm  
2 = 5.76 mm to 7.34 mm  
3 = 7.34 mm to 8.34 mm

4 = 8.34 mm to 9.53 mm  
5 = 9.53 mm to 10.72 mm  
6 = 10.72 mm or larger

1	2	3	4	5	6
NA	NA	NA	NA	NA	NA

3 sieve	<input type="checkbox"/> N <input type="checkbox"/> A	cm length	<input type="checkbox"/> N <input type="checkbox"/> A	mm width	<input type="checkbox"/> N <input type="checkbox"/> A	mm thickness
4 sieve	<input type="checkbox"/> N <input type="checkbox"/> A	cm length	<input type="checkbox"/> N <input type="checkbox"/> A	mm width	<input type="checkbox"/> N <input type="checkbox"/> A	mm thickness
5 sieve	<input type="checkbox"/> N <input type="checkbox"/> A	cm length	<input type="checkbox"/> N <input type="checkbox"/> A	mm width	<input type="checkbox"/> N <input type="checkbox"/> A	mm thickness
6 sieve	<input type="checkbox"/> N <input type="checkbox"/> A	cm length	<input type="checkbox"/> N <input type="checkbox"/> A	mm width	<input type="checkbox"/> N <input type="checkbox"/> A	mm thickness



pl  
See replacement Exhibit rec'd 1/84

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
BELTSVILLE, MARYLAND 20705EXHIBIT C  
(Bean)OBJECTIVE DESCRIPTION OF VARIETY  
BEAN (*Phaseolus vulgaris* L.)

NAME OF APPLICANT(S) Wilbur - Ellis Co. Seed Division	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) East 12001 Empire Way Spokane, Washington 99206	PVPO NUMBER 8300037
	VARIETY NAME OR TEMPORARY DESIGNATION PILGRIM (PVD 865)

Place numbers in the boxes (e.g.  ) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: . The location of test area is . Please answer questions appropriate for your variety if the information is available.

## 1. TYPE:

☒ 1 = Field (dry-edible)      2 = Garden

## 2. MARKET MATURITY:

 Days to edible pods Days to green shells Days to dry seeds Heat units to edible pods Heat units to green shells Heat units to dry seeds No. days earlier than . . . . .

None other for type. Same as . . .

 No. days later than . . . . .1 = Tendercrop  
3 = Kinghorn Wax  
5 = Michelite 62  
7 = Bush Blue Lake 2902 = Kentucky Wonder  
4 = White Kidney  
6 = Dwarf Horticultural  
8 = Other (specify below)9 = Royal Red Kidney  
10 = 9 Days earlier than Seafarer  
11 = 5 Days earlier than Emerson

## 3. PLANT:

☒ 1 = Determinate      2 = Indeterminate cm height cm shorter than . . . . .

Same as . . .

comparison variety from above

 cm taller than . . . . . cm spread Number primary branches near base cm narrower than . . . . .

width same as . . .

comparison variety from above

 cm wider than . . . . . Branching habit:  
1 = compact      2 = open Main stalk: 1 = brittle      2 = wirey 1 = stout      2 = thin



Replacement page 3 - rec'd 10/2/84




## 6. FRESH PODS: (Cont'd)

- ☐ 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- ☐ 2 Creaseback: 1 = present 2 = absent
- ☐ 1 Pubescence: 1 = none 2 = sparse 3 = considerable
- ☐ 1 Spur: 1 = straight 2 = slightly curved 3 = curved
- ☐ 1 Constrictions: 1 = none 2 = slight 3 = deep
- ☐ 2 Pod flesh: 1 = light 2 = medium 3 = dark
- ☐ 0 ☐ 7 mm spur length
- ☐ NA Fiber: 1 = none 2 = sparse 3 = considerable
- 5 ☐ -6 Number of seeds per pod
- ☐ 1 Surface: 1 = smooth 2 = rough
- ☐ 1 Suture string: 1 = present 2 = absent
- ☐ NA Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast
- ☐ NA Machine harvest: 1 = adapted 2 = not adapted
- ☐ NA Pod flavor: (1) Standard (Tendercrop)  
(2) Mild Blue Lake (BBL 274)  
(3) Strong Blue Lake (Pole FM1)  
(4) Mild Romano (Roma)  
(5) Strong Romano (Pole Romano)  
(6) Other (specify) \_\_\_\_\_

## 7. SEED COAT COLOR:

- ☐ 2 1 = Monochrome 2 = Polychrome ☐ 2 1 = shiny 2 = dull
- ☐ 4 Primary color: 1 = white 2 = yellow 3 = buff 4 = tan
- ☐ 7 Secondary color: 5 = brown 6 = pink 7 = red 8 = purple  
9 = blue 10 = black 11 = other (specify) \_\_\_\_\_
- ☐ 2 Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted
- ☐ 5 Secondary color location: 1 = hilar ring 2 = ventral surface  
3 = sides 4 = dorsal surface  
5 = not restricted to any area 6 = combination of location (specify below) \_\_\_\_\_
- ☐ 2 Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

## 8. SEED SHAPE AND SIZE:

- ☐ 1 Hilum view: 1 = elliptical 2 = oval 3 = round ☐ 2 Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round
- ☐ 1 Side view:   
- 1 = oval to oblong 2 = round 3 = reniform



1. Name of the person or organization

2. Address of the person or organization

3. Date of the report

4. Title of the report

5. Summary of the report

6. Findings of the report

7. Recommendations of the report

8. Conclusion of the report

9. Signature of the reporter

10. Date of the signature

11. Name of the person or organization

12. Address of the person or organization

13. Date of the report

14. Title of the report

15. Summary of the report

16. Findings of the report

17. Recommendations of the report

18. Conclusion of the report

19. Signature of the reporter

20. Date of the signature

21. Name of the person or organization

22. Address of the person or organization

23. Date of the report

24. Title of the report

25. Summary of the report

26. Findings of the report

27. Recommendations of the report

28. Conclusion of the report

29. Signature of the reporter

30. Date of the signature



## 8. SEED SHAPE AND SIZE: (Cont'd)

☒ 1 = truncate ends    2 = rounded ends

☒ 48.5 gm/100 seed

☒ N ☒ A gm/100 seed lighter than .....

46.8 gm/100 for # 09

41.2 gm/100 for # 11

☒ 1.7 gm/100 seed heavier than .....

☒ 09

comparison variety from page one

## 9. ANTHOCYANIN: (1 = absent 2 = present)

☒ 2 Flowers

☒ 2 Stems

☒ 2 Pods

☒ 2 Seeds

☒ 1 Leaves

## 10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant):

☒ 0 Anthracnose (specify race below)

☒ 1 Rust (specify race below)

☒ 0 Powdery mildew

☒ 2 Fusarium root rot

☒ 0 Pythium root rot

☒ 0 Rhizoctonia root rot

☒ 2 Pythium wilt

☒ 0 Angular leaf spot

☒ 0 Bacterial wilt

☒ 1 Halo blight (specify race below)

☒ 1 Fusious blight

☒ 0 Red node virus

☒ 0 Pod mottle virus

☒ 2 Bean common mosaic virus (specify strain below)  
BV1, BV2 and NY 15

☒ 0 Mosaic mottle

☒ 1 Black root

☒ 2 Bean yellow mosaic virus

☒ 2 Curly top

☐ Other (specify below)

## 11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

☒ 1 Aphids

☒ 2 Leaf hopper

☒ 1 Lygus

☒ 1 Pod borer

☒ 0 Root knot nematode

☒ 0 Seed corn maggot

☒ 0 Thrips

☐ Weavils

☒ 2 Other (specify below)  
Two-spotted mites

## 12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

☒ 2 Heat

☒ 0 Cold

☒ 2 Drought

☒ 1 Air pollution

13. COMMENTS: Leaves remain functional on plant, even though pods have dry seeds.



830037

RECEIVED  
OCT 2 1984  
U.S. DEPARTMENT OF AGRICULTURE  
AMS PNP0

